

FIG. 1

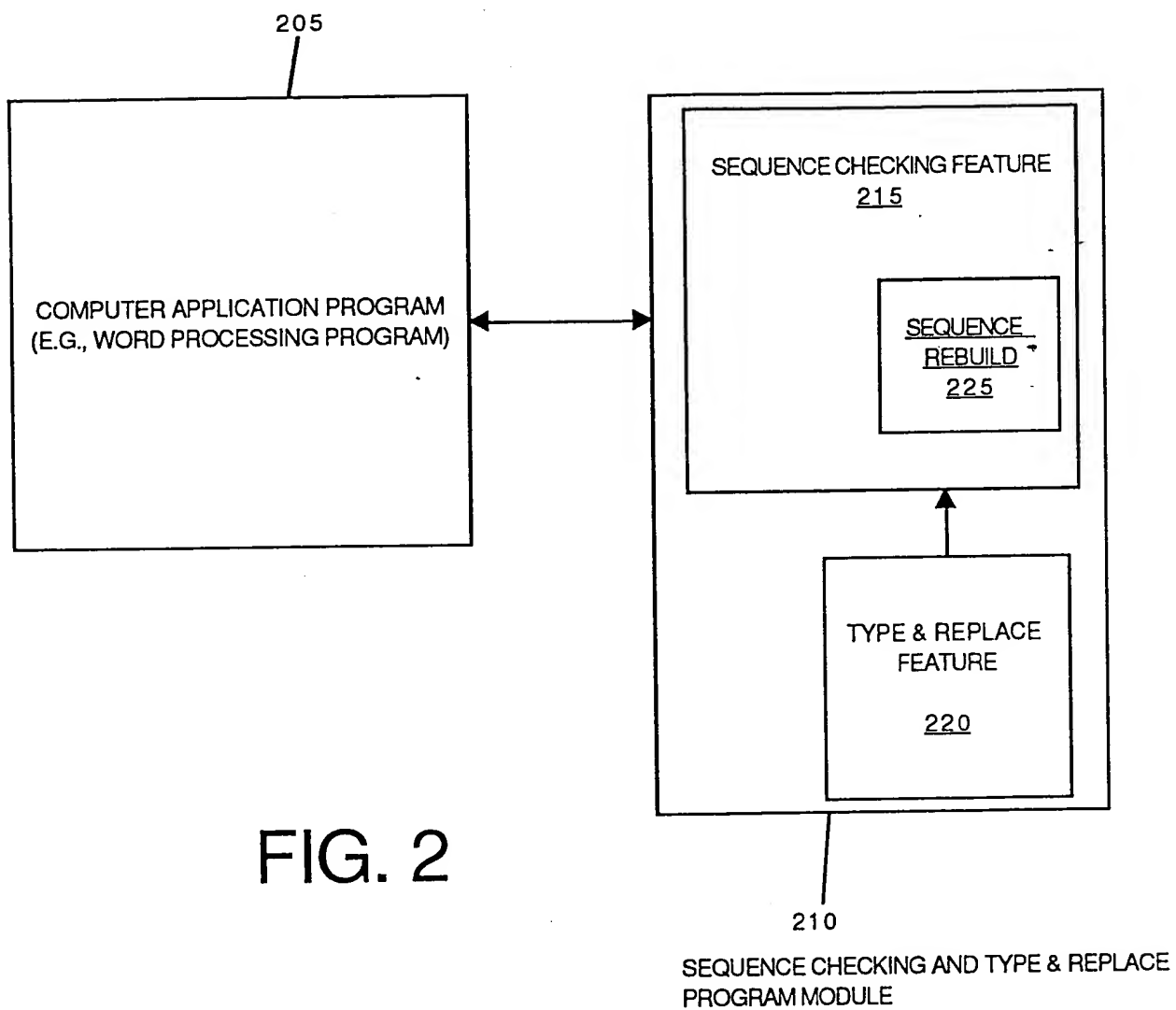


FIG. 2

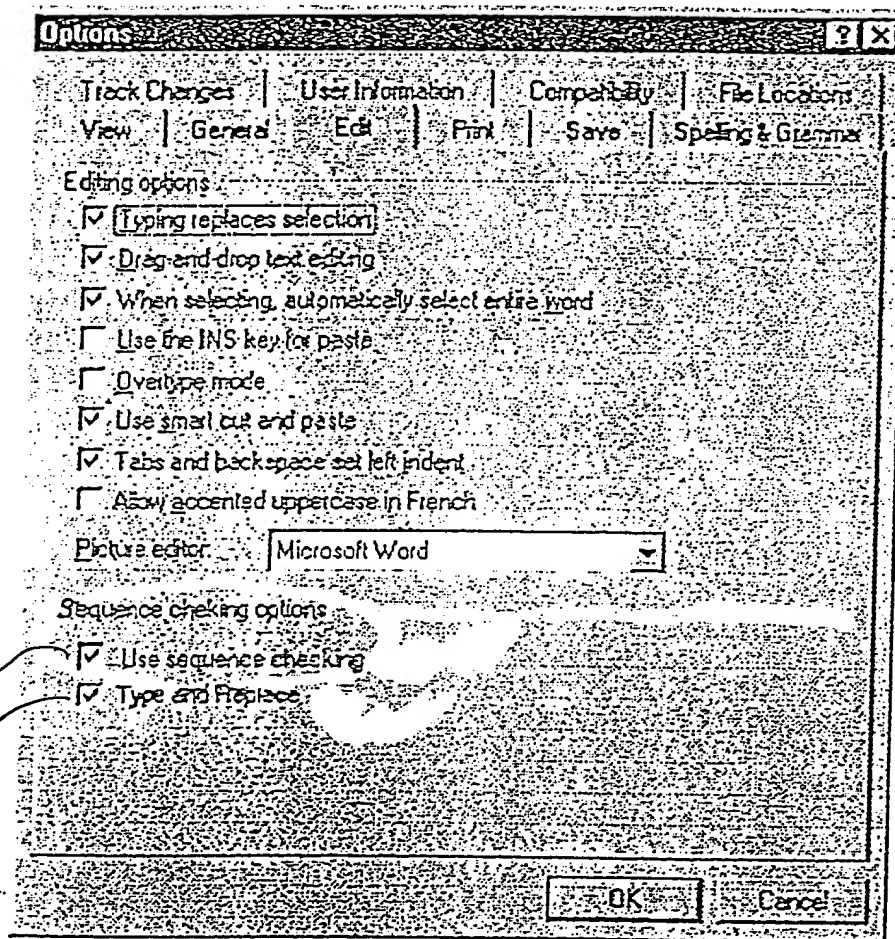
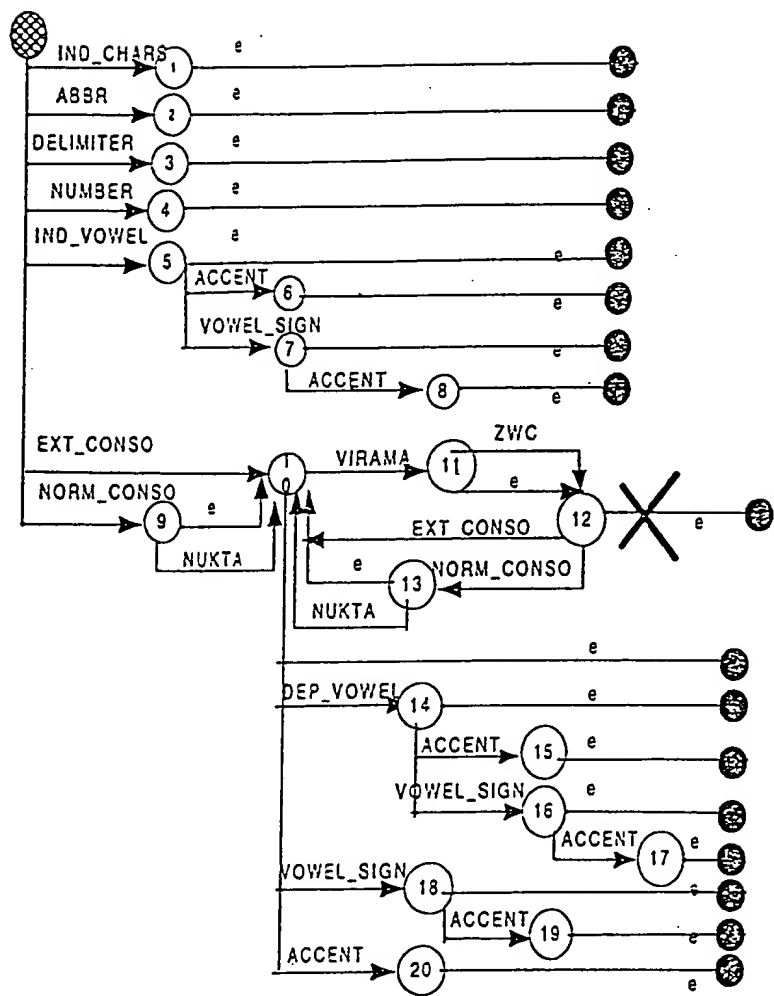


Fig. 3

CHARACTER		{}	ind_c hars	abbr	delimit	number	ind_vo wel	norm_ conso	ext_ onso	virama	nukta	dep_vo wel	vowel _sign	accent	zero idth chars
CONTEXT	STATE		k	Ab	D	Nb	lv	Nc	Ec	V	Na	Dv	Vs	Ac	Zw
initial	0	0	1a	2a	3a	4a	5a	9a	10a						
k	1	0													
Ab	2	0													
D	3	0													
Nb	4	0													
lv	5	0											7a	6a	
lAc	6	0											8i1	6r1	
lVs	7	0											7r1	8a	
lVsAc	8	0											8r2	8r1	
Nc	9	10									10a				
NcNa	10	0								11a		14a	18a	20a	
NcNaV	11	12													12a
NcNaVZc	12	*						13a	10a						
NcNaVNc	13	10									10a				
NcNaDv	14	0										14r1	16a	15a	
NcNaDvAc	15	0										16r2	17i1	15r1	
NcNaDvVs	16	0										16r2	16r1	17a	
NcNaDvVsAc	17	0										17r3	17r2	17r1	
NcNaVs	18	0										16i1	18r1	19a	
NcNaVsAc	19	0										17i2	19r2	19r1	
NcNaAc	20	0										15i1	19i1	20r1	

Fig. 5



Hindi Sequence Checking State Transition Graph



Start state



Stop state



Transition state



Transition

Fig. 5A

VIETNAMESE SEQUENCE CHECKING STATE TRANSITION GRAPH AND CHART

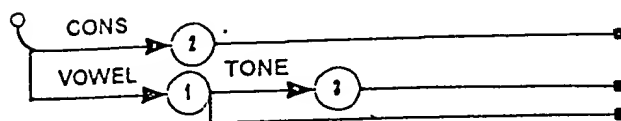


Fig. 6A

CHARACTER			VOWEL	TONE	CONS
CONTEXT	STATE		V	T	C
initial	0	0	1a		2a
V	1	0		3a	
C	2	0			
VT	3	0		2r	

Fig. 6

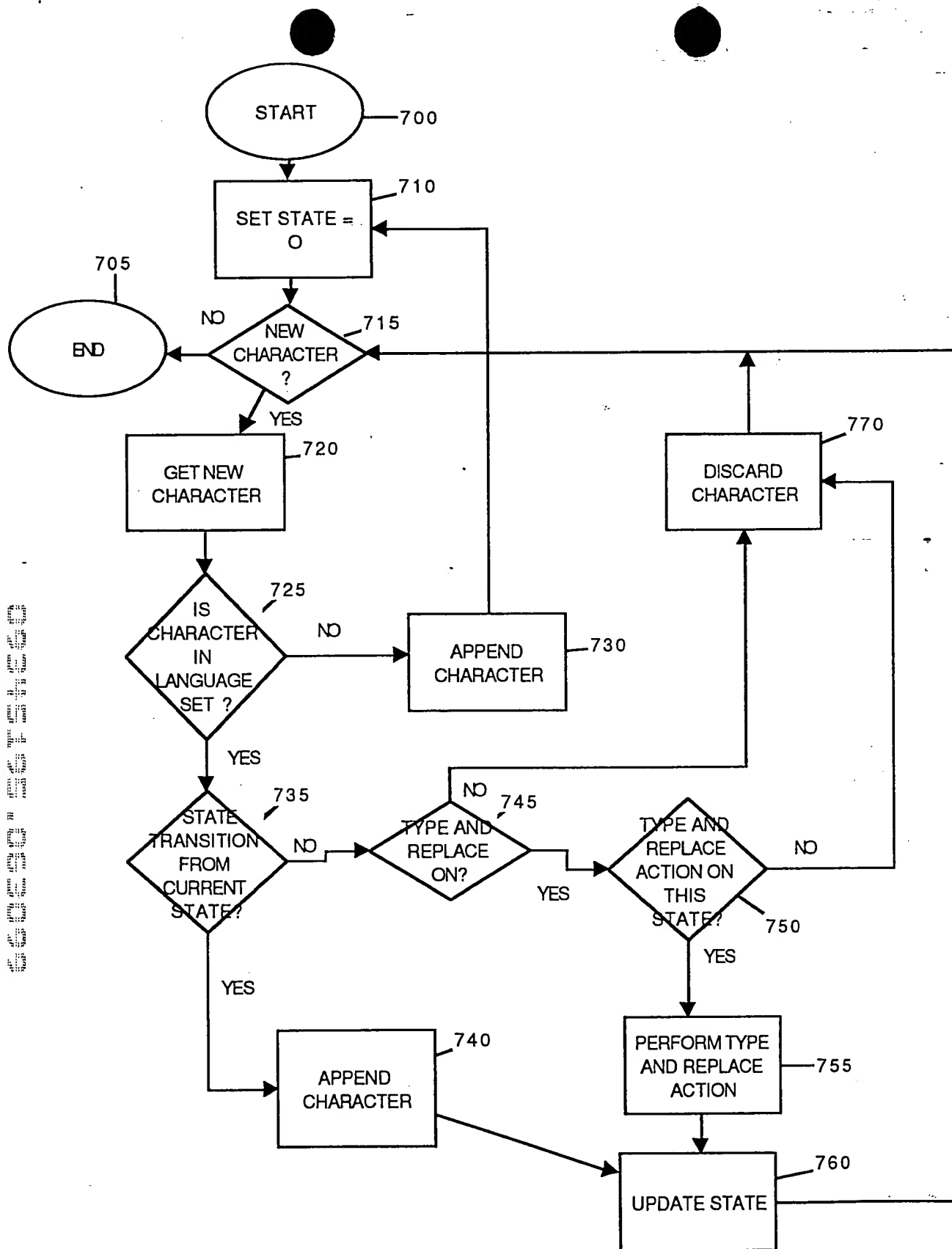


FIG. 7

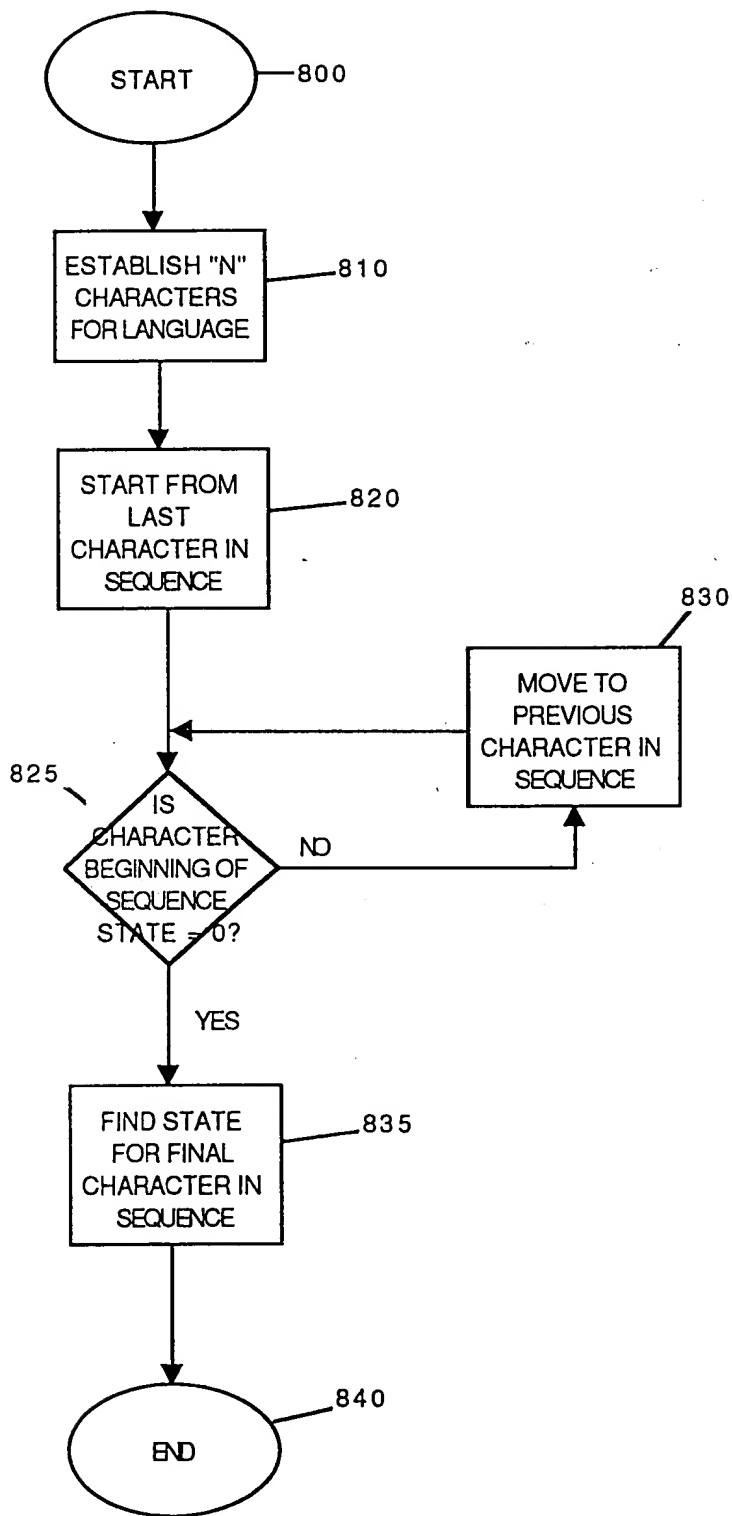


FIG. 8

SYMBOL	INDEX	ACTION	EXAMPLE
Char a	IP	Append the character char	$AB \Rightarrow Ca \rightarrow ABC$
Char I [n]	IP-n where $n > 0$	Insert the character Char at the index location (before the ith character from the right)	$ABD \Rightarrow Ci] \rightarrow ABCD$
d[1]	IP-1	Remove the previous character	$AB \Rightarrow d \rightarrow A$
dn	IP-n where $n > 1$	Remove the character at the index location	$ABC \Rightarrow d2 \rightarrow AC$
Char r[1]	IP-1	Replace the previous character with Char	$AC \Rightarrow Br \rightarrow AB$
Char rn	IP-n where $n > 1$	Replace the character Char at the index location with the new character	$ADC \Rightarrow Br2 \rightarrow ABC$
Cxy		Contextual information (this does not necessarily generate an action) for a possible character composition by the client application. In the Thai transition table "x" has the following values: "a" for composing the last 2 characters into LV3 (Sara-AE) or "b" for composing the last 2 characters into FV3 (Sara-Am). "y" indicates the number of the next transition state.	$ABC \Rightarrow Cx2 \rightarrow AD$ (if x composes B and C into D)

SYMBOL	ACTION	EXAMPLE
FV3r	Substitute the last character with FV3	$\Rightarrow FV3r \rightarrow$

Fig 9A

keyboard input	Output
क	क
,	क्
क	क्क
ी	क्की

Fig 10

keyboard input	Output
क	क
,	क्
ी	क्

Fig. 11

keyboard input	Output
क	क
,	क्
य	क्य
ि	किय
.	कियं
ी	क्यों

Fig. 12